

Abstract

A tool for manufacturing a multi-colored plastic automotive part, such as a door panel, is manufactured using multiple molding shots without opening the mold between each shot. The door panel comes out finished with no scuffing, warping, or shrinkage. The process for manufacturing the panel includes selectively locating spacers within the tool to a first position and then injecting a first material. The parting line is held closed while the spacers are then advanced to a second position so as to set the inner insert to a desired second shot wall thickness position. A second shot of material is then introduced into the rear of the injection unit through an opening in the first shot part. The process can be repeated for additional colors and materials to create a multi-colored or even multi-material final assembly. Once the part is cured, it is ejected and the process is complete.